

IX.3.4B-SYSTEM-WPD24P SUBROUTINE WPD24P

Description

Subroutine WPD24P writes all 24 hour precipitation data for one day to the Preprocessor Data Base (PPDB).

Calling Sequence

CALL WPD24P (IDATE, LDATA, IDATA, LWORK, IWORK, ISTAT)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
IDATE	Input	I*4	1	Julian day of data <u>1</u> /
LDATA	Input	I*4	1	Length of array IDATA (I*2 words)
IDATA	Input	I*2	LDATA	Array containing data for all 24 hour precipitation stations for day IDATE (not encoded) <u>2</u> /
LWORK	Input	I*4	1	Length of array IWORK (I*2 words)
IWORK	Input	I*2	LWORK	Work array
ISTAT	Output	I*4	1	Status code: 0 = okay 1 = tried to replace a non-missing value on file 2 = not enough space in array IWORK

Notes:

- 1/ Julian day specified is the day corresponding to the end of the 24 hour period in Z time for which data are stored.
- 2/ The IDATA array holds 24 hour precipitation values in I*2 format and corresponds with the 24 hour data array returned by subroutine RPDDL. The values in IDATA are not encoded and the ending hours for which the data apply have been lost. The following rules are used to store values on the PPDB:
 - o Observed and estimated 'observed' values in the IDATA array are greater than or equal to zero. If the corresponding values are missing or estimated, the IDATA values are encoded and flagged as estimates and replace the corresponding PPDB values. Observed values are never replaced.

- o Estimated nonzero values in the IDATA array are less than zero and greater than -9998. Estimated zero values in the IDATA array are equal to -9998. These values replace missing or estimated values. Observed data are never replaced with estimated. It is an error with status equal 1 if an attempt is made to replace an observed value with an estimate.
- o Missing values in the IDATA array are equal to -9999. Data are never replaced with missing values.

3/ Estimated 24 hour precipitation data are encoded as:

$$\text{IVAL} = ((\text{PP} - 3000) * 10) + (\text{ISGN} * 8)$$

where PP is the precipitation value in hundreds of an inch
ISGN is -1 if PP LE 3000
ISGN is 1 if PP GT 3000
IVAL = the value stored on the PPDB